In the present work I concern myself with the development of Particle systems library independent on any concrete graphical library. Particle systems are used in various graphical applications to render interesting e ects (for example: fi re, waterfall, smoke, explosions, etc.) which are nearly impossible to be rendered the same way as other ordinary objects in scene. Given the fact that this is very complex theme I choose to concentrate mostly on interactions between particles that would be fast enough for online rendering. For possible hard to compute interactions I allow saving calculated properties of particles and afterwards their fast playback. Because many moderns processors have more than one core some calculations in my library can run parallel in more threads.